

**PROCEDURES FOR VERIFYING FLOAT TEST
APPARATUS
AASHTO T 50**

A. PURPOSE

This procedure is intended to give instruction for the verification of the weight and critical dimensions of the float and collar. Other equipment used to perform the Float Test is checked per the verification form.

B. APPARATUS REQUIRED

1. Calibrated calipers readable to 0.05 mm
2. Balance, Class G2.

C. PROCEDURE

1. Weigh the float and collar separately. Report weights to the nearest 0.01 gram.
2. Measure height of rim above lower side of shoulder, thickness of shoulder, and diameter of opening, and overall height of collar. Report measurements to the nearest 0.1 mm.
3. Measure inside diameter of bottom, and inside diameter at top of collar. Report measurements to the nearest 0.01 mm.

D. TOLERANCE

Float test apparatus shall meet the physical requirements specified in AASHTO T 50.

EQUIPMENT VERIFICATION RECORD

Verified By: _____	Date: _____
Equipment: <u>Float Test Apparatus</u>	Location (Lab): _____
Identification No.: _____	Verification Frequency: _____
Previous Verification Date: _____	Next Due Date: _____
Verification Equipment Used: Calibrated balance, ID #: _____ Rule, ID #: _____	
Caliper, ID #: _____	
Verification Procedure: <u>(In-house) OMR-CVP-32 / AASHTO T 50</u>	

1. Float:
 - (a) Made of aluminum or aluminum alloy?
 - (b) Weight of 37.70 – 38.10 g? (balance used: _____)
 - (c) Total height 34.0 – 36.0 mm (1.34 – 1.42 in.)?
 - (d) Height of rim above lower side of shoulder 26.5 – 27.5 mm (1.04 – 1.08 in.)?
 - (e) Thickness of shoulder 1.3 – 1.5 mm (0.05 – 0.06 in.)?
 - (f) Diameter of opening 11.0 – 11.2 mm (0.43 – 0.44 in.)?
2. Collar:
 - (a) Made of brass?
 - (b) Weight 9.6 – 10.0 g? (balance used: _____)
 - (c) Height 22.3 – 22.7 mm (0.88 – 0.89 in.)?
 - (d) I.D. at bottom 12.72 – 12.92 mm (0.50 – 0.51 in.)?
 - (e) I.D. at top 9.65 – 9.75 mm (0.38 – 0.38 in.)?
3. Have float and collar assemblies been calibrated for depth of immersion?
4. Thermometer: ASTM 15 C or 15F?
5. Water Baths:
 - (a) Testing Bath (Measuring device used: _____)
 - (1) Smallest lateral dimension at least 185 mm (7.28 in.)?
 - (2) Water depth at least 185 mm (7.28 in.)?
 - (3) Height of bath container above water level at least 100 mm?
 - (4) Heated by gas or electric heater?
 - (5) Thermometer can be immersed to a depth of 38 - 42 mm (1.50 – 1.65 in.) below the water?
 - (b) Cold Bath
 - (1) Maintained at 6.0 – 6.0 C?
 - Method of checking: _____ Quality Control Device Used: _____
 - (2) Large enough to hold float and collar assembly and plate?
6. Miscellaneous Equipment:
 - (a) Heater: Oven or hot plate?
 - (b) Spatula or steel knife?
 - (c) Flat plate (for pouring sample into collar)?
 - (d) Timer: Divisions of 1 second or less?
 - (e) Suitable release agent?